Reducing Employee Turnover Through the Use of Preemployment Application Demographics: an Exploratory Study

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Abstract:

Understanding and managing employee turnover are important dimensions of the hospitality manager's job objectives. One way to improve our understanding of this nagging managerial problem is to better understand how selection techniques can influence turnover levels. In a series of regression analyses, different preemployment demographics are tested for their predictive strength. Education, work experience, and income potential were significant predictors. Ironically, the variables that are now legally restricted as hiring criteria-gender and age-showed no significant relationship to propensity to leave. Restaurant managers may want to closely examine preemployment applications for education level and the individual's area of study.

Keywords: turnover | demographic factors

Article:

INTRODUCTION

Turnover is a critical and costly problem for the hospitality industry (Bonn & Forbinger, 1992). Annual turnover estimates range from 60% (Wasmuth & Davis, 1983) to triple digit figures (Pavesic & Brymer, 1990). Each incident of employee turnover in the hospitality industry is estimated to cost up to \$2,500 in direct costs and \$1,600 in indirect costs (Hogan, 1992).

In addition to monetary costs of turnover, there are managerial problems associated with workers leaving that are equally important. For instance, until replacements can be hired and trained, managers may have to handle customer demand during peak work periods with fewer servers. In addition, shortages of qualified entry-level workers make it difficult to replace those employees who quit. Fewer available servers can result in reduced customer service, which can translate into unhappy customers and lost business. Longer work hours for other employees could also lead to burnout and further turnover.

Factors related to turnover can be classified as (1) external; (2) structural or work related; and (3) internal, based on personal characteristics of the employees (Cotton & Tuttle, 1986). External factors identified include employee perceptions of the job, unemployment rates, and union presence. Work-related factors involve issues such as wages, job performance, task repetitiveness, and job satisfaction. Age, job tenure, gender, education, and marital status are examples of personal factors that have been examined in relation to turnover (Cotton & Tuttle, 1986; Parasuraman & Futrell, 1983; Gable, Hollon & Dangello, 1984).

One way to reduce the high levels of turnover in the hospitality industry is to be aware of existing employees' intention to quit. A wide range of studies have concluded that propensity to leave is the immediate precursor to turnover (Hom, Griffeth & Sellaro, 1984; Lee & Mowday, 1987; Johnston & Futrell, 1989). Sager, Varadarajan, and Futrell (1988) further proposed that intention to quit/propensity to leave results from a sequenced withdrawal process, beginning with job dissatisfaction, and progressing to the next stage-thinking about quitting. They have suggested that managers should be taught to identify the stages of withdrawal so that they can make changes before an employee's intention to quit becomes an incident of turnover.

Management's awareness of employee intention to quit can help reduce turnover rates among existing employees. Retaining current employees is most often the focus of turnover-related studies (Cotton & Tuttle, 1986), but preventing turnover through improved selection techniques could be more cost effective in the long run. A better way to retain employees may be to hire people who are less likely to leave. An awareness of demographic factors that are characteristic of employees who quit can help managers select employees who are, in the long run, more likely to stay. This study represents an initial attempt to identify preemployment links between employee demographics and actual turnover rates. This study was focused on selection-related criteria and establishing the linkage with propensity to quit.

The aim of this study was to provide a profile that could be useful in hiring employees who are more likely to remain with a company. This profile should help managers reduce turnover by hiring the right person for a job. Furthermore, by identifying these applicants or potential employees, managerial and customer service problems created by employee turnover will be reduced, resulting in greater profitability for the firm.

REVIEW OF LITERATURE

A large number of studies have demonstrated that demographic factors can serve as predictors of turnover. However, the extent to which demographic factors are indicators of turnover varies by the type of industry studied. The demographic factors most commonly researched include age, work experience, tenure with the company, education, marital status, and gender.

Age is usually negatively related to turnover. Darden, Hampton, and Boatwright (1987) demonstrated that older employees are less likely to leave a firm. Cotton and Tuttle (1986) and Parasuraman and Futrell (1983) also concluded that age is negatively related to turnover. Fern, Avila, and Grewal (1989) found no significant differences between age and turnover in their study of computer salespeople employed by a large American computer manufacturer. They hypothesized that the difference was due to the homogeneity of the surveyed population. Tenure and overall work experience also have been found to be negatively related to turnover. Previous research has indicated that the length of time an employee has been with the company may be a deterrent to turnover (Fern et al., 1989). Parasuraman and Futrell (1983) concluded that the length of time spent with a particular firm is negatively related to intention to quit. Unfortunately, there is no sure way to determine, a priori, how long a prospective employee will remain with a firm once he or she is hired.

Since employee tenure with a firm is not available prior to hiring an employee (new employees do not have tenure in the firm), examining overall work experience or industry tenure is one way of including this information in the hiring process and may help in the selection of individuals who are less likely to leave. Previous research has suggested that the more experience an employee has, the less likely that individual is to leave (Darden et al., 1987). Gable et al. (1984) concluded that prior work experience is an accurate predictor of turnover. They further stated that voluntary turnover in the retail environment could be minimized by hiring candidates who possess substantial retail work experience.

Education has been shown to be positively related to turnover and intention to quit (Cotton & Tuttle, 1986; Parasuraman & Futrell, 1983). The reason for this may be that better educated individuals perceive themselves to possess marketable skills. They show a greater intention to quit than their less educated peers, possibly because they are more optimistic about their prospects for employment outside their current position.

Previous research also has indicated that income is negatively related to intention to quit (Parasuraman & Futrell, 1983). Although higher pay is related to lower turnover, the relationship depends on whether the individual is a professional or a nonprofessional employee. Turnover was found to be less reliably tied to pay for nonprofessional employees than for professional employees (Cotton & Tuttle, 1986). Using the wage rates offered by a firm is one way to determine a portion of income prior to hiring. Tips are another form of server compensation. Since servers receive the majority of their compensation from customers' tips (a commission-based form of compensation), it is difficult to reliably determine actual income before hiring an individual. Commission potential, however, can be estimated based on average meal prices since the price of a meal is a principal determinant of actual tip income.

Marital status also needs to be considered in relation to turnover. The Gable et al. (1984) study of retail management trainees showed that married people were less likely to leave than were nonmarried employees. Additionally, Cotton and Tuttle (1986) found that married employees are somewhat less likely than unmarried employees to quit.

Some studies have suggested that women may be more likely to quit their jobs than men (Cotton & Tuttle, 1986). Often, women leave the workforce because their family obligations are more important than the supplemental income they provide to the household. Other research, however, discovered that male bank tellers were more likely to quit their job than women (Stumpf & Dawley, 1981). Their reasoning for this apparent contradiction is that the sex role stereotype and low pay associated with a bank teller's position led to greater turnover among male employees.

The likelihood of an employee leaving has been studied by many different researchers for a variety of reasons. However, some findings appear contradictory. These contradictions may be due to the tendency of most studies to focus on one industry or one company. Determinants of turnover in one environment may not be as significant in another environment. Cotton and Tuttle (1986) found that the type of industry affected the correlation of pay and employee turnover differently in service organizations than in a manufacturing environment. For example, pay is not as consistently related to turnover in service firms such as those in the hospitality industry as it is in other organizations.

THE CURRENT STUDY

Inconsistencies in research findings concerning the relationship between demographic factors and turnover indicate this linkage may be industry specific. The current study examined propensity to quit among servers employed by mid-to-upscale restaurants. Mid-to-upscale restaurants are foodservice operations that feature table service and have an average menu entree price between \$6 and \$10. One goal of this research was to develop a demographic profile that can be used to help firms in the restaurant industry hire employees who are less likely to exhibit quitting tendencies. Another intended outcome of the current study was to identify constructs that should be included in future studies of the turnover process among service industry employees.

Methods and Measurements

The study was conducted in a major metropolitan area in the southeastern United States. Surveys were distributed by the research team to 380 servers at 17 restaurants during staff meetings. The multipage instrument required less than 15 minutes to complete. Questionnaires were returned by 256 individuals. Of those, 194 had complete data and were included in the current study. This represents approximately a 51 % response rate. Fifty-seven percent of the respondents were female. Individuals participating in the survey averaged slightly over 26 years of age and had approximately seven years of overall work experience, with an average of six years in the restaurant industry. Ninety-nine percent had high school diplomas and eighty-seven percent were attending college or already had earned degrees.

The survey instrument gathered demographic and organizational information that has been linked to turnover or propensity to leave by previous research. Items suggested by previous research and included in the survey were: age, gender, education, industry experience, marital status, wage rates, and the price of meals in the restaurant. The last two items were used as measures of potential income since income cannot be measured in advance of hiring someone.

An employee's intention to quit was measured through the use of Bluedorn's (1982) measure, which includes four items. The items address propensity to leave during four time periods: within 3 months, within 6 months, within 1 year, and within 2 years. The four scale items also can be summed to represent an employee's overall propensity to leave (Cronbach's Alpha = .92). These items have been used in a number of previous studies that report acceptable reliability and validity (Futrell & Parasuraman, 1984; Johnston, Futrell, Parasuraman, & Sager, 1988). This measure was used as an approximation of turnover since previous research indicated that it is the

immediate precursor of turnover (Sager et al., 1988). The current study examined the relationship of demographic characteristics with propensity to leave during each of the four time categories as well as for the overall measure.

Due to the exploratory nature of this study, the analysis involved two stages. First, correlations were obtained for the constructs of interest (See Table 1). In the second stage, demographic factors that were significantly related to propensity to leave in stage one were further analyzed through a hierarchical regression technique. This process allowed the selection, in order of importance, of those constructs that predicted the dependent measure, in this case propensity to leave. Hierarchical regression was chosen because of the high level of intercorrelations between some of the predictor variables. This procedure allowed an identification of how much variance in the propensity to leave measure was predicted by each additional construct that entered into the prediction.

Variable Number	1	2	3	4	5	6	7	8	9	10	11	12
1. Quit in 3 months												
2. Quit in 6 months	.88											
3. Quit in 12 months	.69	.86										
4. Quit in 24 months	.31	.50	.70									
5. Propensity to leave	.83	.94	.95	73								
6. Work Experience	07	15	17	26	19							
7. Industry Experience	05	10	15	19	16	.74						
8. Price of Dinner	04	10	15	14	13	.17	.19					
9. Wage rate	.08	.02	08	16	03	.07	.08	04				
10. Age	01	05	10	20	10	.76	.70	.12	.16			
11. Gender	01	04	07	03	06	09	.01	01	.01	.01		
12. Education	.15	.16	.22	.25	.23	06	03	.08	40	.20	03	
13. Marital Status	.04	.07	.03	06	.03	.31	.25	01	.11	.47	.13	07

Table 1. Correlation Matrix of Variables Linked to Propensity

All correlations exceeding .13 are significant (p < .05).

All correlations exceeding .17 are significant (p < .01).

RESULTS AND DISCUSSION

Correlations indicated that all of the propensity to leave measures were highly correlated (See Table 1). With regard to an employee's propensity to leave within three months, people with higher levels of education indicated a higher propensity to leave. This construct accounted for just over two percent of the variance in the dependent measure.

Further analysis indicated that both education level and general work experience were related to employee intentions of quitting within six months (Table 2). Again, waitstaff with higher levels of education were more likely to quit than workers with less education. However, work experience was negatively related to quitting intentions at this stage. The same two variables were significant predictors of the likelihood of an employee quitting within one year. Furthermore, the relationships were similar with education being positively and work experience negatively related to an employee's propensity to leave. The amount of variance explained was not great. Only four percent of the variance in propensity to leave within six months could be explained and seven percent of an employee's propensity to leave within twelve months.

Independent Variable	Model F	Model R ²	Change in R ²	Significance of Change							
Education	4.5°	.021	—	_							
Work Experience	4.5 ^b	.042	.021	.05							
(WITHIN 12 MONTHS)											
Independent Variable	Model F	Model R ²	Change in R ²	Significance of Change							
Education	9.8 ^b	.045	—	_							
Work Experience	8.1ª	.072	.028	.01							
	(WITHIN 24 MONTI	HS)								
Independent Variable	Model F	Model R ²	Change in R ²	Significance of Change							
Education	10.0 ^a	.050	—	_							
Work Experience	12.6 ^a	.117	.067	.001							
Wage Rate	11.7ª	.155	.038	.01							
Price of Mean	9.9ª	.173	.018	.05							
	(OVERA	LL PROPENSITY T	O LEAVE)								
Independent Variable	Model F	Model R ²	Change in R ²	Significance of Change							
Education	9.8 ^b	.045									
Work Experience	8.7ª	.078	.033	.01							

Table 2. Regression Results for Dependent Measure of Propensity to Leave (within six months)

^a Significant at p < .001.

^b Significant at p < .01.

^c Significant at p < .05.

When the time frame is doubled to two years, some additional factors can be useful in predicting a worker's propensity to leave. Once again, education and work experience were significant (p < .001). In addition, wage rate (p < .001) and the price of meals at the restaurant (p < .05) were related to the propensity of an employee quitting within two years. Results indicated that higher wage levels and a more expensive menu lessened the intention of an employee to leave. This is probably due to the increased income that one would experience with a higher base wage, as well as the increased revenues that a successful server could make from tips on higher priced meals. These four measures: education, work experience, wage rates, and menu prices accounted for over 17% of the variance in propensity to leave within 24 months.

These results indicated that education was a consistent predictor of quitting intentions even within as short a time frame as three months. When the time horizon was extended to one-half year, previous work experience also became a significant factor in determining if waitstaff were thinking about quitting. The same results were true for a one-year time frame. When propensity to leave was addressed on a two-year basis, income issues became important factors. The ability of an individual to earn more income also was related to the likelihood of quitting. For the overall propensity to leave measure, education and work experience were the only predictors (p < .01) of a worker's propensity to leave.

Discussion and Implications

Employee turnover has negative implications, both financially and managerially, for a restaurant. Previous research indicates that the propensity to leave (PTL) measure is a strong predictor of actual turnover (Futrell & Parasuraman, 1984). The current study addressed the individual and firm-specific factors that are associated with a propensity to leave the organization. Identifying

demographic characteristics of current employees who indicate a lower propensity to leave may be helpful in developing a profile, which in turn could become one dimension of the selection and hiring decision. This approach is predicated on the assumption that hiring waitstaff applicants with characteristics similar to those waitstaff already employed will result in similar levels of propensity to leave. In such a situation the use of this type of selection criteria may lead to reduced server turnover.

Education and work experience were the only two demographic characteristics, identified by this study, that were significantly correlated with propensity to leave. In addition, the firm-specific factors, wage rate and potential commissions (tips) were also related to propensity to leave.

Education is positively related to propensity to leave. This finding is similar to that of Cotton and Tuttle (1986). There are several possible reasons for this relationship. First, a large proportion of the hospitality industry work force is comprised of students. This field of employment offers flexible work hours and can be economically rewarding. Second, some people with a college education take employment as waitstaff while looking for other work. Educated individuals often see this type of position as a short-term stop between school and their chosen career. While educated individuals may relate well to the clientele at up-scale restaurants, thereby increasing business, they also will more readily leave for other types of jobs that may be less physically demanding and more financially lucrative.

The finding of a negative relationship between work experience and propensity to leave was expected. Darden et al., (1987) also indicated that work experience was negatively related to turnover. The current study supports the use of work experience as a critical hiring criterion. Applicants with little or no previous work experience are not as likely to remain with a restaurant for over six months when compared to more experienced workers. Once again, some individuals may see this type of work as "short-term" while they look for other jobs or go to school.

Wage and potential commissions (tips) are negatively related to an employee's propensity to leave. This is somewhat surprising since some of the research into nonprofessional jobs suggests that income may not be a significant factor in turnover decisions (Cotton & Tuttle, 1986). Current findings tend to support those of Parasuraman and Futrell (1983) who indicated that income does influence an employee's propensity to leave. One reason for this finding may lie in the commission component of waitstaff pay. By doing an outstanding job in a restaurant with a more expensive menu, an employee has considerable power to increase his or her pay over that of workers in less expensive establishments.

In addition, firms that pay higher wages can expect their employees to be less likely to indicate a propensity to leave than firms with lower wages. It is possible that the higher wage rates lead to greater organizational commitment and loyalty on the part of the employee. Another possibility is that wages somewhat "buffer" the waitstaff against those time periods when fewer people eat out and tips are lower than usual. Higher levels of income may make working as a tipped foodserver more attractive relative to other employee income through wages and the ability to earn better tips may allow an establishment to retain more educated workers and increase employee loyalty to the firm.

A number of laws regulate hiring practices and discrimination during the selection process. It is interesting to note that age and gender do not correlate with propensity to leave. These two characteristics are often the subject of legal action when improperly used to select employees. The current study finds that, for waitstaff, age is not a useful factor in predicting which employees are more likely to leave. This finding differs from that of Darden et al. (1987) who found that older employees tended to stay with convenience store firms. It is possible that the fairly young age of average waitstaff personnel, which make it a relatively homogeneous group, reduces the strength of the relationship between age and propensity to leave. Fern et al. (1989) offered a similar explanation for their finding of no age difference in turnover among computer salespeople.

Research has linked gender to turnover. Cotton and Tuttle (1986) suggested that women may be more likely to leave a position. Stumpf and Dawley (1981) indicated the opposite and said that in some situations men are more likely to quit. The current study found no correlation between gender and propensity to leave at any of the four levels examined. This finding differs from earlier works and may be another indication that the relationship between demographic factors and propensity to leave, or turnover, may be job specific.

Study results indicated that server hiring can be improved by carefully considering an individual's level of education. Although not specifically examined, an extension of the education question may include the likelihood of a person obtaining employment in their chosen career field. In addition, people with greater levels of previous work experience appear to be better hires than those without experience, relative to their chances of leaving. These findings also suggest that one way to keep employees is to make sure they can make a decent living through a combination of wages and the opportunity for larger tips.

A comparison of demographics as predictors of propensity to leave versus previous research examining work-related attitudes such as job satisfaction or organizational commitment suggests that the attitudinal measures are better predictors (Hom et al. 1984; Sager et al., 1988). However, demographic measures (education, work experience) and business characteristics (wages, meal prices) can be addressed prior to hiring, whereas the other measures examine attitudes of those individuals who are already working. Therefore, even though business and personal factors only account for between 3 and 17% of the variance in propensity to leave, depending on the time horizon being examined, this represents a significant improvement over not using this information.

Regardless of hiring practices, the fact is that many waitstaff are not looking at these positions from a career perspective. Often, working as a tipped foodservice employee is seen as a viable job only until something better comes along. These positions are often used to allow an individual to earn money to go to school or serve as a second income to help with family expenses, but not as a long-term employment prospect. Thus, restaurants can look forward to relatively high levels of turnover regardless of hiring practices. However, using the selection criteria developed in this study may lead to an overall reduction in server turnover rates.

Implications for Managers

Restaurant managers may want to closely examine preemployment applications for education level and the individual's area of study. College students with few available job options and in areas where the jobs tend to offer low pay, could be relatively good hires since their economic costs of remaining in server positions are not as great. However, educated workers who are unhappy to be in this position may not be effective employees. While the trade press encourages the recruitment and selection of a better educated workforce, such advice may be compounding the turnover problem.

Work experience should factor more heavily into hiring decisions. This can be particularly true for applicants that have worked as waiters or waitresses since training costs may be reduced. Furthermore, because they know what the job requires they should be less likely to have unrealistic expectations concerning the position. Managers also should give consideration to scheduling work hours around more profitable shifts for employees who are likely to stay. Conversely, managers could use scheduling to make the job more attractive for individuals who have higher levels of education or greater income requirements.

Limitations and Future Research

Although the current study offers some useful findings, it has certain limitations. First, all of the servers that were surveyed worked at mid-to-upscale restaurants. It is possible that the results of this study are not applicable to hiring employees for establishments with a lower menu prices or a lower average check. In addition, because the study was done in a metropolitan area, findings may not apply to firms located in more rural or small town locations. Another limitation results from the study's focus on existing employees versus newly hired employees or proposed new hires. Although past studies indicate a strong relationship between propensity to leave and turnover, an employee's stated intentions may not always result in behavior. Finally, the cross-sectional nature of the study precludes examining actual turnover behavior.

The current study indicated that additional research should examine several issues of interest. First, does education and work experience predict turnover as well as propensity to leave? Second, are there additional factors, such as a person's work ethic or personal motivation, that predict turnover intentions and are measurable in a preemployment test of some sort? Identifying and measuring such personal traits could add to the predictive power of preemployment applications regarding the propensity of employees to leave. Furthermore, these factors could be used to extend models of the turnover process by including preexisting tendencies on the part of an employee. Another research topic could address the question of "who are career waitstaff?" Studies could try to determine if there are any significant predictors that would identify individuals who enjoy the position and intend to make a career of this type of work.

CONCLUSIONS AND SUMMARY

Much of the research on propensity to leave and employee turnover focuses on work-related attitudes and alternative employment opportunities. This is often done without giving adequate consideration to preemployment characteristics of the applicant and the nature of the position

itself. These factors should be included in models of the turnover process to improve our current understanding of propensity to leave and turnover. While demographic characteristics do not appear to explain a large percentage of the variance in turnover intentions, they may have considerable influence on other factors such as job satisfaction and organizational commitment that are highly related to propensity to leave and turnover. Replications of this study are encouraged to identify the salient demographic as well as attitudinal indicators of propensity to leave.

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